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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/856,022 | 05/16/2001 | Guy Barre | TS 5549 US | 2253 |

7590 08/06/2003
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Houston, TX 77252-2463

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| 7 EXAMINER |
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GRIFFIN, WALTER DEAN

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| ART UNIT | PAPER NUMBER |
| 1764 | |

DATE MAILED: 08/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/856,022

Applicant(s)

BARRE ET AL.

Examiner

Walter D. Griffin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

The claim objections and rejections described in paper no. 5 have been withdrawn in view of the amendment filed on May 27, 2003 and remarks contained therein. The arguments concerning these rejections are moot and will not be addressed.

New rejections follow.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless--

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 98/01515 to Moureaux.

The Moureaux reference discloses a process for dewaxing a hydrocarbon that has a sulfur content of less than 1000 ppmw and a nitrogen content of less than 50 ppmw. From this teaching, it is clear that the hydrocarbon feed to be dewaxed can contain sulfur and nitrogen amounts within the claimed range. The process comprises contacting the hydrocarbon with a catalyst comprising a noble metal, a zeolite such as a dealuminated ZSM-5 zeolite, and a silica binder. The ZSM-5 zeolite would necessarily have a constraint index within the claimed range. The dealumination of the zeolite can be achieved by methods disclosed in European patent

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specification 96921992.2 (EP 0832171 B1). These methods include treatment of zeolite and binder extrudates with an aqueous solution of a fluorosilicate salt. See page 9, lines 30-35; page 10, lines 1-3; page 11, lines 9-18 and 30-35; page 14, lines 4-31; page 15, lines 17-35; page 16, lines 1-5; page 21, lines 20 and 21; and page 22, lines 1-11.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 10, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over

WO 98/01515 to Moureaux.

The Moureaux reference discloses a process for dewaxing a hydrocarbon that has a sulfur content of less than 1000 ppmw and a nitrogen content of less than 50 ppmw. From this teaching, it is clear that the hydrocarbon feed to be dewaxed can contain sulfur and nitrogen amounts within the claimed range. The process comprises contacting the hydrocarbon with a catalyst comprising a noble metal, a zeolite such as a dealuminated ZSM-5 zeolite, and a silica binder. The ZSM-5 zeolite would necessarily have a constraint index within the claimed range. The dealumination of the zeolite can be achieved by methods disclosed in European patent specification 96921992.2 (EP 0832171 B1). These methods include treatment of zeolite and binder extrudates with an aqueous solution of a fluorosilicate salt. Following the dewaxing, the dewaxed feed is subjected to a hydrotreatment step. See page 9, lines 30-35; page 10, lines 1-3; page 11, lines 9-18 and 30-35; page 14, lines 4-31; page 15, lines 17-35; page 16, lines 1-5; page 21, lines 20 and 21; and page 22, lines 1-11.

The Moureaux reference does not disclose the feeds of claims 10 and 11 and does not disclose the retrofitting process.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Moureaux by utilizing the claimed feeds because these feeds are physically and chemically similar to those disclosed by Moureaux and therefore would be expected to be effectively treated in the Moureaux process.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Moureaux by replacing a solvent dewaxing step with the catalytic dewaxing step because Moureaux discloses that solvent dewaxing is

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necessary if the dewaxing step is not present. Therefore, one would substitute catalytic dewaxing for solvent dewaxing since each type of dewaxing performs an equivalent function.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/01515 to Moureaux as applied to claim 1 above, and further in view of Ward (US 4,743,354).

As discussed above, the Moureaux reference does not disclose further hydrocracking of the dewaxed product.

The Ward reference discloses the hydrocracking of an effluent from a dewaxing zone. See column 8, lines 28-51.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Moureaux by hydrocracking the effluent from the dewaxing zone as suggested by Ward because desired products including middle distillates will be produced.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/01515 to Moureaux as applied to claim 1 above, and further in view of Abdo et al. (US 4,867,861).

As discussed above, the Moureaux reference does not disclose utilizing nickel in the catalyst.

The Abdo reference discloses dewaxing catalysts that contain noble metals or nickel. See column 11, lines 34-41.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Moureaux by utilizing nickel in the catalyst as suggested by Abdo because nickel has an equivalent function to noble metals such as platinum and therefore would be expected to be effective in the dewaxing catalyst of Moureaux.

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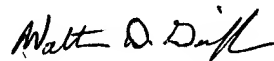
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art not relied upon discloses dewaxing processes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter D. Griffin whose telephone number is 703-305-3774. The examiner can normally be reached on Monday-Friday 6:30 to 4:00 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Walter D. Griffin
Primary Examiner
Art Unit 1764

WG
August 1, 2003